

Wastewater Manhole Corrosion-Protection:

Composite Frames and Covers:

1. Composite Access Products (CAP), CAP ONE

Frame and cover shall be H-20 traffic certified and per interim COC Detail C-400, including raised City logo.

Composite Adjustment Rings:

1. Ladtech, Inc. high density polyethylene (HDPE) manufactured in accordance with ASTM D4976.

Adjustment rings shall be interlocking, H-20 traffic certified and installed per manufacturer, and interim COC Detail C-401, TYPE 'B'. Use only approved adjustment rings, no shims of any kind are allowed.

Composite or Polymer Concrete Manholes:

1. Containment Solutions, Inc. (fiberglass reinforced polyester)
2. LFM Fiberglass Structures (fiberglass reinforced polyester)
3. JPCI Services Inc., Sewer Shield Composites LLC (epoxy resin reinforced with fiberglass)
4. Armorock, Polymer Concrete.

Manholes shall be stand-alone, H-20 traffic certified and installed per manufacturer, MAG and City of Chandler's specifications. Base shall be cast-in-place only using polymer concrete or concrete with approved protective coating.

Coating Systems:

1. Sauereisen Sewergard Lining No. 210 as manufactured by Sauereisen Cements, Pittsburgh, PA.
2. Sewer Shield 150 Epoxy Lining as manufactured by Environmental Coatings, Mesa, AZ.
3. Raven 405 Epoxy Lining as manufactured by Raven Lining Systems, Tulsa, OK.
4. Neopoxy NPR 5300 Series Epoxy Lining by Neopoxy International, Hayward, CA.

The applicator of the corrosion-protective coating is required to have a minimum of three years of experience coating wastewater manholes. The City Inspector may request written verification of said experience at any time. The applicator shall have written verification from the manufacturer of the corrosion-protective coating system that is being applied that said applicator is an approved, certified applicator of the manufacturer's products. The City Inspector may request said written documentation at any time. Application shall be done in accordance with the City of Chandler's specifications.

Wastewater Manhole Pesticide Coating System:

1. Insecta Insecticide Coating.

Wastewater Force Main Pipe Materials:

1. PVC Pipe in accordance with City MAG Supplement Section 751.
 - 4" – 12" diameter shall conform to AWWA C900 with a 200 psi pressure rating.
 - 14" – 24" diameter shall conform to AWWA C905, with a 235 psi pressure rating.
 - PVC may only be used outside of roadway areas.
 - All pipe fittings shall be DIP in accordance with MAG Specification Section 750.
2. PVC Pressure Pipe SDR-26 in accordance with ASTM D2241. Not allowed under roadway areas.
3. HDPE per Municipal Utilities Department requirements.

Storm Drain Pipe Materials:

1. Rubber Gasket Reinforced Concrete Pipe (RGRCP) in accordance with MAG Section 735.
2. Polypropylene (PP) Pipe (ADS HPStorm) in accordance with MAG Specification Section 740.
 - Not allowed in public right-of-way
3. High Density Polyethylene (HDPE) Pipe in accordance with MAG Specification Section 738.
 - Not allowed in public right-of-way or private streets
 - Up to 60" diameter allowed in landscape areas and in parking lots

Storm Drain Catch Basins:

1. Catch basins within public right-of-way and private streets must be concrete with a steel grate.
2. Catch basin on private property connected to a private storm drain system within landscape areas or areas subject to wheel loading may be composite or Nyloplast (or approved equal), and must be a manufactured product intended for use as a catch basin.

Sanitary Sewer Pipe Materials:

1. Polyvinyl Chloride (PVC) SDR 35 in accordance with MAG Section 745.
 - Greater than 15" diameter is not allowed.
 - Up to 15" diameter is allowed to depths of cover of less than 10'.
2. Polyvinyl Chloride (PVC) SDR 26 in accordance with MAG Section 745.
 - Greater than 15" diameter is not allowed.
 - 15" diameter and smaller is allowed.
3. Extra-Strength Vitrified Clay Pipe (VCP) in accordance with MAG Section 743.

Potable and Reclaimed Water Pipe Materials:

1. Ductile Iron Pipe (DIP), Pressure Class 350 in accordance with MAG Section 750. Polyethylene encasement is required and shall conform to MAG Specification 610.6.
2. PVC Pipe in accordance with City MAG Supplement Section 751.
 - 4" – 12" diameter shall conform to AWWA C900 with a 200 psi pressure rating.
 - 14" – 24" diameter shall conform to AWWA C905, with a 235 psi pressure rating.
 - PVC may only be used outside of roadway areas.
 - All pipe fittings shall be DIP in accordance with MAG Specification Section 750.
3. Water pipe less than 4" in diameter shall be PVC schedule pipe in accordance with ASTM D1785 or D2241 with a minimum working pressure of 200 psi.

Water Valve Manufacturer's:

1. Clow Valve Co.
2. Mueller Co. or products manufactured with the exact specifications i.e. all parts are interchangeable.
3. Kennedy Valve Co.
4. American Flow Control

Joint-Restraining Materials:

APPROVED RESTRAINED JOINTS FOR PIPE:

1. TR Flex Gripper Ring and TR Flex joint products with exact specifications as manufactured by US Pipe.
2. American Fast Grip and Flex-Ring joint as manufactured by American Cast Iron Pipe Company.
3. MEGALUG Ductile Iron Pipe Restraints as manufactured by EBAA Iron Inc.

APPROVED RESTRAINED JOINTS FOR FITTINGS:

1. Series 1100 megalug restraint produced by EBAA Iron, Inc.
2. Series 3000-30000S Stargrip by Star Pipe Products.
3. Sigma DIP One Lok SLDE Series.
4. Tyler Union Tuf Grip Restraint.

Fire Hydrants:

1. Mueller Centurian.
2. Clow Medallion.
3. Waterous Pacer.
4. Kennedy Guardian.

Water Meter Angle Ball Valves and CORP Stops:

1. Ford.
2. Mueller.
3. AY McDonald.

4. Jones.

Only, no approved equals.

Water Meter Adaptors:

1. The Ford Meter Box Company, Meter Adaptors to change meter spud size and/or length

Backflow Prevention Assemblies:

Backflow prevention assemblies shall conform to the current list issued by the Foundation for Cross Connection Control and Hydraulic Research, University of California and/or the American Society of Safety Engineers and be UL listed or FM approved for fire protection use when used for fire protection systems.

Combination Air/Vacuum Assemblies (Potable & Reclaimed)

16" and smaller mains

1. A.R.I. D-040
2. Dorot DAV-P-2-NPT-KA

Mains larger than 16"

1. A.R.I. D-046
2. Dorot DAV-MH-KA

Detectable Sidewalk Warning Devices:

Detectable warning shall be raised truncated domes manufactured by:

1. CASTinTACT Wet Set.
2. TekWay Dome Tiles with anchor system.
3. ADA Arcis Tactile.

Color shall be terracotta and contrast to pavement. Installation shall be in accordance with manufacturer's recommendations.

Striping Obliteration Surface Slurry Sealant:

1. Brewer Cote Resurfacer II

Median Interlocking Paving Stones:

1. Pavestone: City Stone II type, Old Town Blend color, and Random Ashlar pattern.
2. Belgard: Catalina type, Old Town Blend color, and Random Ashlar pattern.
3. Acker-Stone Industries: Street Stone I (3"x6", 6"x6") / Street Stone II (6"x9") type, Gila River color, and Random Ashlar pattern.

Pavers shall be 6 cm or 8 cm thickness and Random Ashlar pattern using 3"x6", 6"x6" and 6"x9" stones.